Raynet One Technology Catalog 14.1

14.1.3447.108 [RTM]

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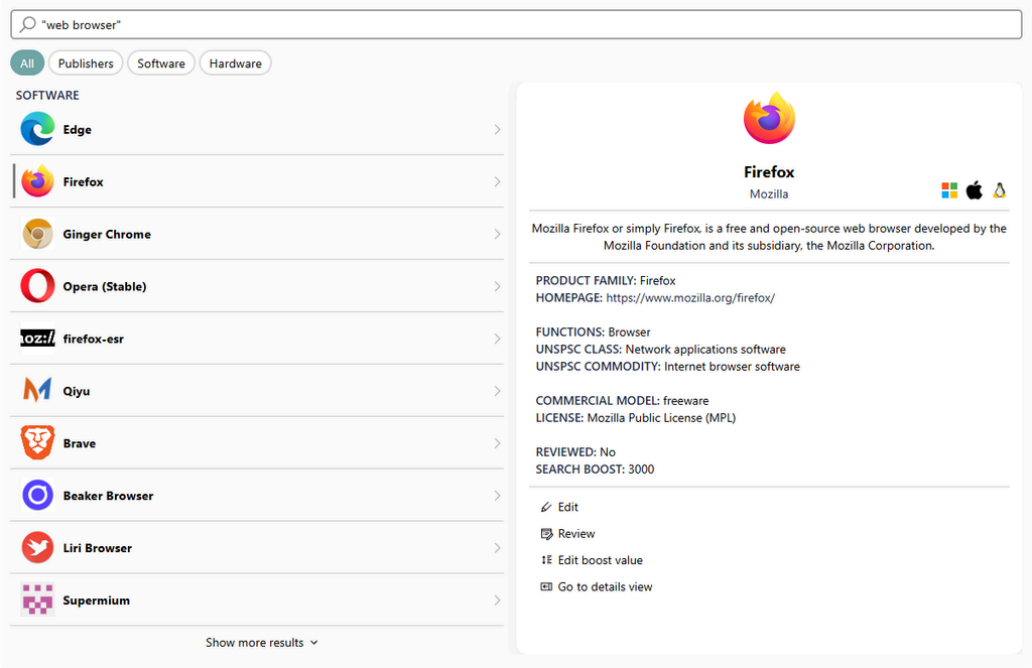
Fast and Accurate Global Search RCAT-29 RCAT-45

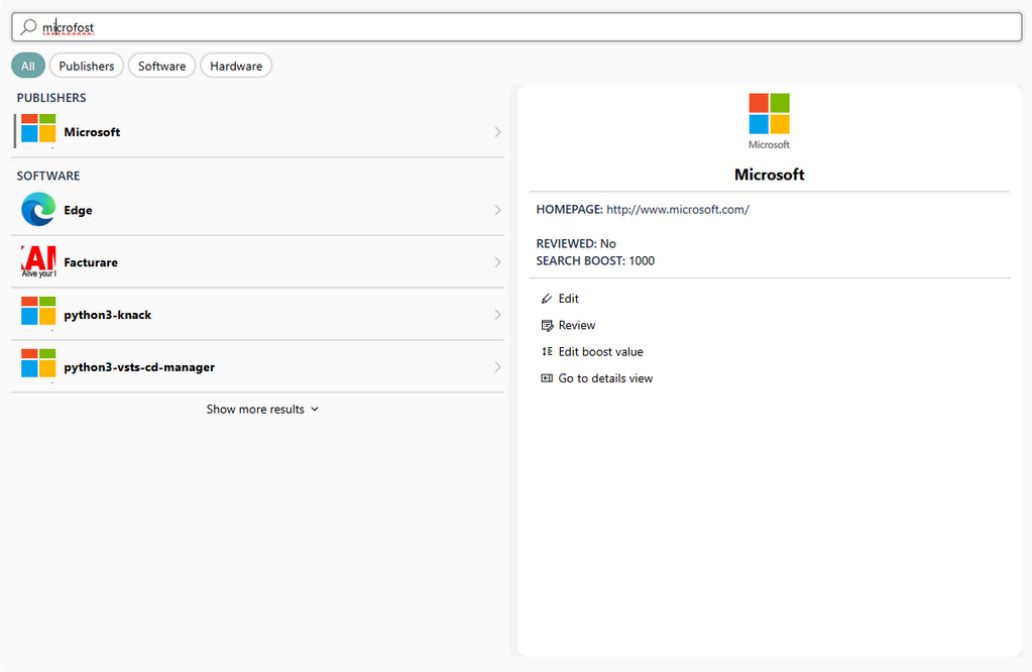
There is a new UI mode for fast, global searches that return exact matches for search queries. To initiate the search, click the magnifying glass button in the top right corner.

This triggers an overlay panel that provides instant search capabilities. Search has the following features and key benfits:

- **Instant, Real-Time Results**
  It is fast and real-time - reflecting changes in the underlying data immediately.
- **Comprehensive coverage and smart filtering**
  It works globally, returning results for publisher, software, and hardware matches. It is also possible to narrow the results to a specific category.
- **Available Everywhere**
  Available as a global UI feature and accessible through the REST API. It can be easily integrated with any external service.
- **Intelligent Error Handling**
  It is typo-resilient - small errors that preserve semantic meaning do not affect the availability of search results.
- **Customizable Relevance**
  It provides a boosting mechanism, where specific products, vendors, and entities can be ranked higher due to their importance. The boosting mechanism is also available on on-premises instances, making it a powerful feature for highlighting software that is important, approved, or otherwise promoted, while ensuring that less relevant or disapproved matches do not appear.



Searching for "web browser" returns products that are web browsers. The right pane shows details about the current selection.

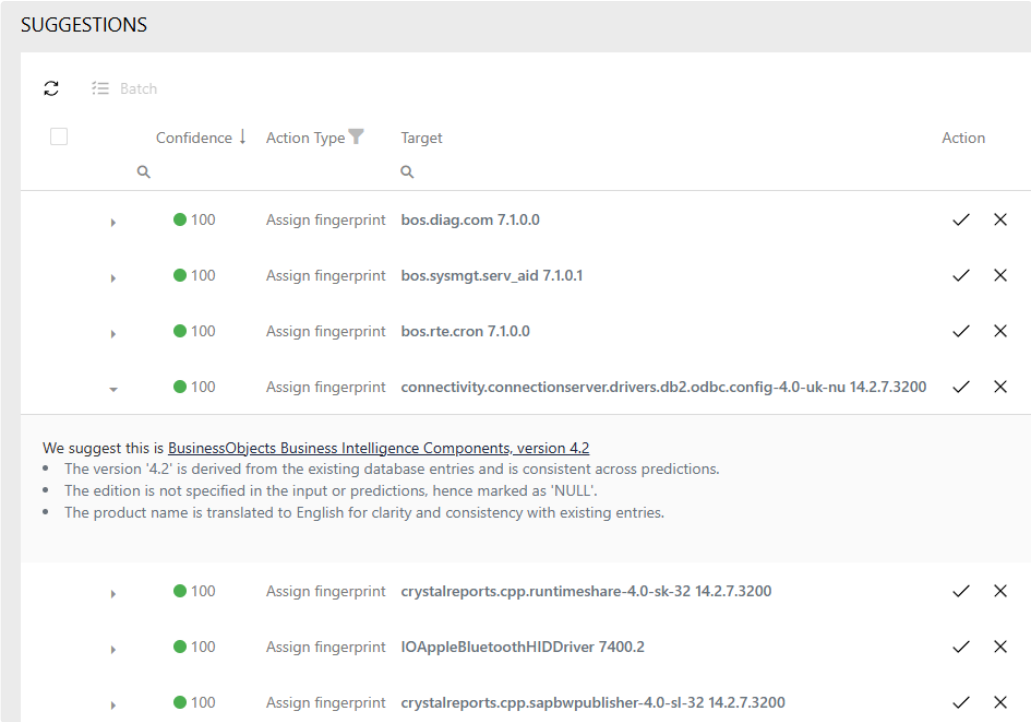


Searching for an intentionally misspelled string "*Microfost*" still returns Microsoft.

This enhanced search experience ensures that users spend less time searching and more time acting on accurate information, improving efficiency and decision-making across your organization.

Machine Learning / Artificial Intelligence for Even Faster Data Processing RCAT-46

The Technology Catalog now features an advanced AI-driven module that intelligently suggests changes, additions, and improvements based on real-world data. Leveraging our own trained machine learning models, this enhancement ensures faster, higher-quality, and more relevant content normalization and recognition.



The new AI Suggestions view is available on the redesigned *Suggestions* page, providing users with a clear and intuitive interface to review, approve, or refine AI-driven recommendations.

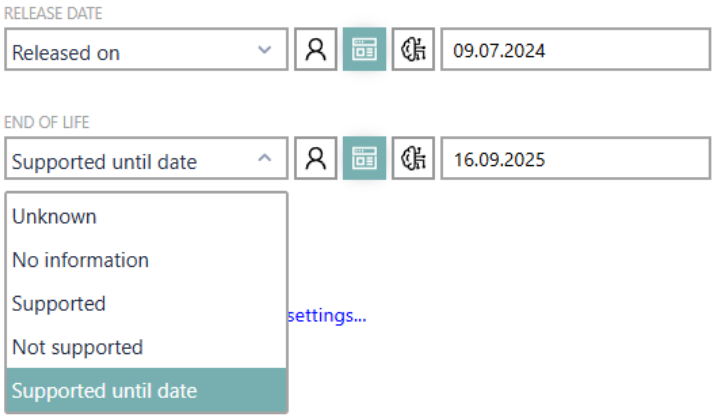
By integrating machine learning, we are moving towards a proactive, intelligent catalog that enhances efficiency while maintaining expert-level accuracy and content curation.

> During the pilot phase, AI-generated suggestions will undergo expert validation to ensure precision (Human-in-the-Loop (HITL) Assurance). Over time, more decisions will be fully automated, with retrospective quality checks maintaining reliability.

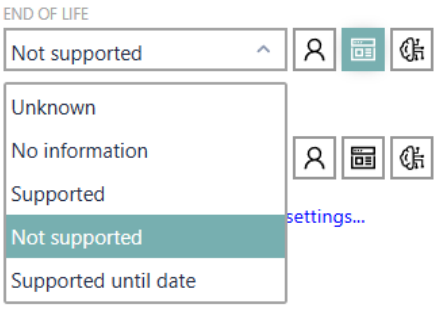
Granular Settings for the End-of-Life and End-of-Extended-Support Data RCAT-58 ZEN-32236 RCAT-147 RCAT-154

Managing software lifecycle status is now more precise and flexible. In previous versions of the Technology Catalog, software status (end-of-life, extended support, etc.) was calculated based on the presence of the “benchmark” date. This was a problem for many items where it was clear that the software was no longer supported, but there was no specific date to support the theory. Similarly, this posed problems for software that was supported but whose end-of-life was dynamic and unknown.

To mitigate this, in this version of the catalog, we may declare the software to have reached its end-of-life, even if we do not have a specific date to support this claim (the same applies to the extended date). At the UI level, this is reflected by additional fields and choices for each claim:



A sample of a product, which contains the End-Of-Life date.



This product claim says, it is not supported. No date is provided.

This feature is a non-breaking change. To ensure that previous versions of the API can still consume the new values, we will now return a meta token with a minimum date (`0001-01-01`) for versions that are no longer supported (but no formal date has been announced), and a maximum date (`9999-12-31`) for versions that are supported but no formal end-of-life has been announced.

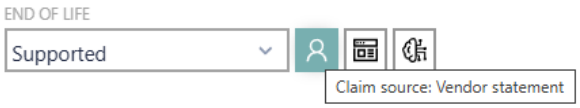
> This change is backward compatible, so new properties do not require changes to the existing implementation.

Thanks to the new properties, it is now possible to determine the type of support status - whether it is a missing date, no official statement from the vendor, or simply pending investigation by Raynet). This new feature ensures that software status is more transparent and actionable, even when exact dates are unavailable.

Claims and Origins of Information RCAT-116 RCAT-115 RCAT-58

As AI plays an increasing role in shaping the Technology Catalog, ensuring transparency and traceability of information is critical. The latest update introduces "claim types", a new feature that allows users to see where data originates and how it was determined.

To ensure that the growing impact of AI is reflected and properly attributed, the catalog now includes a new feature called "claim type". We are rolling this out gradually, starting with release information (release date, end-of-life, extended support).



The software is supported, and the origin claim is the original vendor.

Knowing whether data is vendor-official, third-party sourced, or AI-inferred helps organizations comply with internal governance policies.

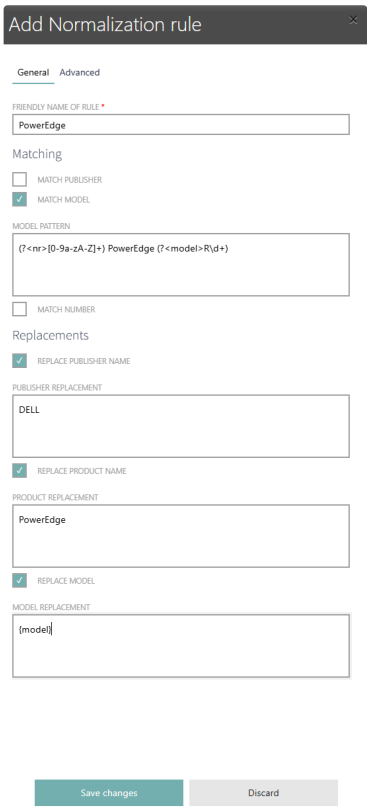
Claim types are both visible in the UI and can be consumed through the REST API. The values can be used to determine, whether:

- The information comes directly from the manufacturer or publisher, or can be found on any other official website/community curated or controlled by the manufacturer.
- The information comes from any other source, including but not limited to other websites, aggregators, encyclopedias, blogs, and databases.
- The information has been inferred using pattern recognition, machine learning, large language models, or similar techniques.

This marks an important step toward a more transparent, AI-powered catalog, where users can rely on both automation and source credibility to manage their IT assets effectively.

Hardware Normalization Rules RCAT-21

What was previously exclusive to software recognition has now been extended to the hardware ecosystem. The new Hardware Normalization Rules provide a simple yet powerful way to pre-process raw data, ensuring correct and consistent hardware identification—even when an exact match isn't available in the catalog.



Sample rule for PowerEdge R* models

Examples of use cases include:

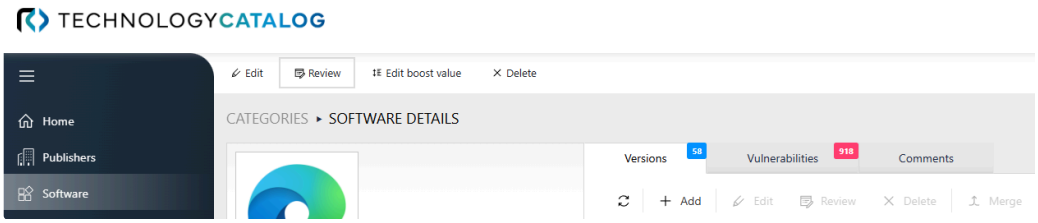
- Recognizing the manufacturer based on some specific naming (such as SKU format)
- Inferring the correct model name from the product name
- Elimination of irrelevant publisher or product specific text.

The normalization logic follows the same principles as its software counterpart, including matching, replacing, and ordering.

These rules are also available to local users as part of the data synchronization process. They should help reduce inconsistencies in hardware product identification, ensuring more reliable asset tracking and help clean up noisy raw data.

Review Features RCAT-2 ZEN-28755

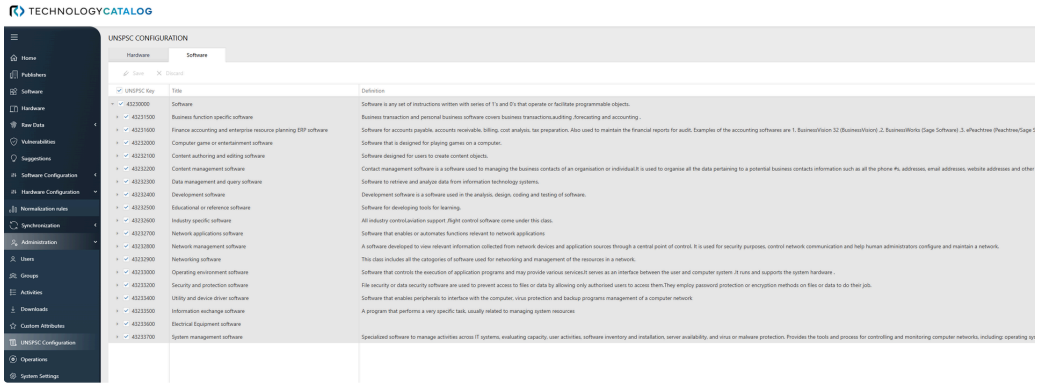
To improve data validation and collaboration, most major data features in the Technology Catalog can now be marked as reviewed, with the option to add comments for additional context.



Catalog contributors, maintainers, and catalog item owners can now confirm data accuracy by marking items as reviewed. The review status is displayed across various catalog views, making it easy to track progress and identify pending verifications. This ensures that catalog data is verified and up to date, reducing inconsistencies and errors.

UNSPSC Category Chooser Hardware RCAT-5

Managing UNSPSC (United Nations Standard Products and Services Code) categories is now more flexible and user-friendly with the introduction of a dedicated settings page that provides access to the full official UNSPSC dictionary.



All UNSPSC categories for the Software.

Located in the Settings category, the purpose of this new section is to define which UNSPSC categories are visible for content editing at software and hardware level. This gives extra flexibility, but also enables use cases where some previously unavailable UNSPSC items were needed, but Catalog did not offer them in the standard code picker.

Automated Fingerprint Processor RCAT-22

The new Automated Fingerprint Processor brings significant efficiency improvements to the catalog by automating the identification and assignment of unassigned fingerprints. This background worker leverages existing data patterns to ensure that new fingerprints are accurately matched to their corresponding versions.

This worker runs in the background and has the following features:

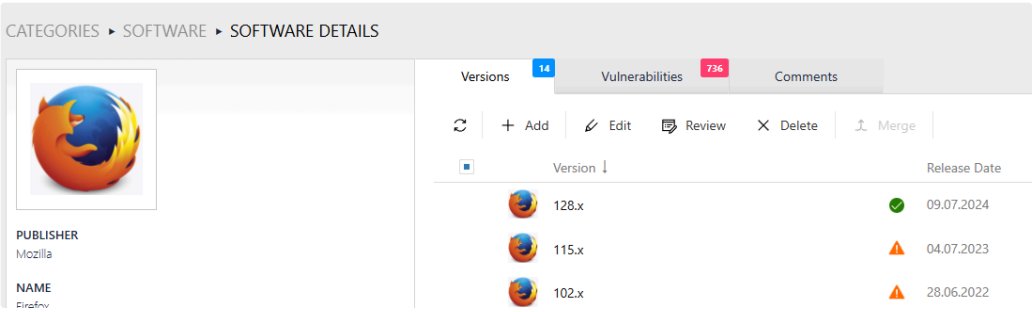
- Identifies close matches by analyzing unassigned fingerprints and identifying those that are closely related to already assigned fingerprints.

- Automates assignment of these unassigned fingerprints to their closest matching versions.
- Scheduled execution supported by a worker infrastructure.

The introduction of this processor will improve processing throughput and reduce the time it takes for the new raw version to be first detected and fully enriched in the catalog. Automation ensures that new fingerprints are assigned to the correct version with greater precision, leading to cleaner and more reliable catalog data.

Tabs Now Have Counters RCAT-53

A small but requested change: all tabs now have little pills showing the number of items in each tab.



It is now much easier to see, which tab contains the data.

The presence of the numbers for each tab makes it easy to cycle through them, knowing which ones are empty and which ones contain the data.

Security Improvements

- We have made uploading user content (such as product logos) safer by analyzing the type of file being uploaded and only allowing files that are compatible with the intent. Non-image files, etc. are now rejected. RCAT-26 RCAT-12
- Resolved an issue, where the `/v1/tokens` endpoint could return metadata of other tokens, even if the requesting user had was not their creator. RCAT-59
- The application now requires knowledge of the current password for the password change functionality. Previously, it was possible to set a new password without knowing the current password. RCAT-39

Other improvements

- Improved the way the "latest" version is calculated. Previously, the algorithm might not have returned the latest version if some releases had an unknown release date AND did not have a consistent release pattern. This version handles this case better. RCAT-25
  - Additionally, some products could have returned a generic version "Any" instead of a specific version. This has also been fixed. RCAT-139
- The server application and its workers are now .NET 8. RCAT-3
- Several minor UI performance improvements by eliminating double superfluous calls. RCAT-110
- Added additional validation to prevent creation of publishers with duplicate names and removal of the name (when editing). Note that this behavior was already correctly protected in the UI, so this change only applies to API usage. RCAT-93 RCAT-94
- API token creation via the API is now not allowed if the value of the token name is empty. RCAT-140
- Improved the default logging format for better consistency and readability. RCAT-34
- It is now possible to define a fallback publisher CPE string for products that are not assigned to a publisher. The input field for this can be found in the Product Edit dialog. RCAT-36
- Removing API tokens is now much faster (for tokens with a large usage footprint). RCAT-134

- Synchronization files are now treated as operations and can be tracked in the user interface (in the *Operations* view). RCAT-95

Resolved issues

- Resolved an issue where it was not possible to export fingerprints to CSV format. The export process was always stuck with an infinite progress bar. RCAT-49 ZEN-31072
- Fixed incorrect behavior for instances receiving data from a parent instance. In case of a specific conflict where a software item was removed on the parent, some remnants at the fingerprint level were possible after synchronizations. The behavior in this new release is to return these fingerprints to the pool instead of assigning them to a deleted product/release. RCAT-18 ZEN-28679
- Fixed an issue where it was not possible to browse the hardware products if the software products had a filter set on one of their specific properties, e.g. "Platform". This problem was caused by the same shared filter sets. In this release, software and hardware filters have their own separate settings. RCAT-50
- Resolved an issue where in some cases it was not possible to delete a user from an existing group. RCAT-70
- Resolved an issue where in rare cases a specially crafted raw fingerprint data sent for recognition could return an error `The recognition engine returned an error with code 0x003` from the recognition API. RCAT-182
- Fixed a subtle problem with calculating MD5 checksum hashes for raw data. Previously, the function was prone to fail due to thread safety issues. Under heavy load, when calculating a large number of fingerprints, this could lead to a collision of hashes, affecting subsequent recognitions. This could be observed by receiving sporadic mismatches between raw and normalized data. The algorithm has been improved and is no longer susceptible to this behavior. RCAT-206

Breaking changes

UI and front-end controls have been migrated to Angular 18. Note that this affects the list of supported web browsers (see https://angular.dev/reference/versions?utm_source=chatgpt.com#browser-support for more details). RCAT-4 RCAT-20

- Chrome and other Chromium-based browsers (Edge, Opera, Vivaldi, Brave etc.): 2 most recent versions
- Mozilla Firefox: latest and extended support release (ESR)
- Apple Safari: 2 most recent major versions

⚠ Other and older browsers may still work, but since they are not officially supported by the Angular framework, they are not supported by the Technology Catalog.
